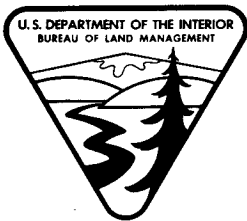


United States Department of the Interior
Bureau of Land Management

New Mexico State Office

February 1999

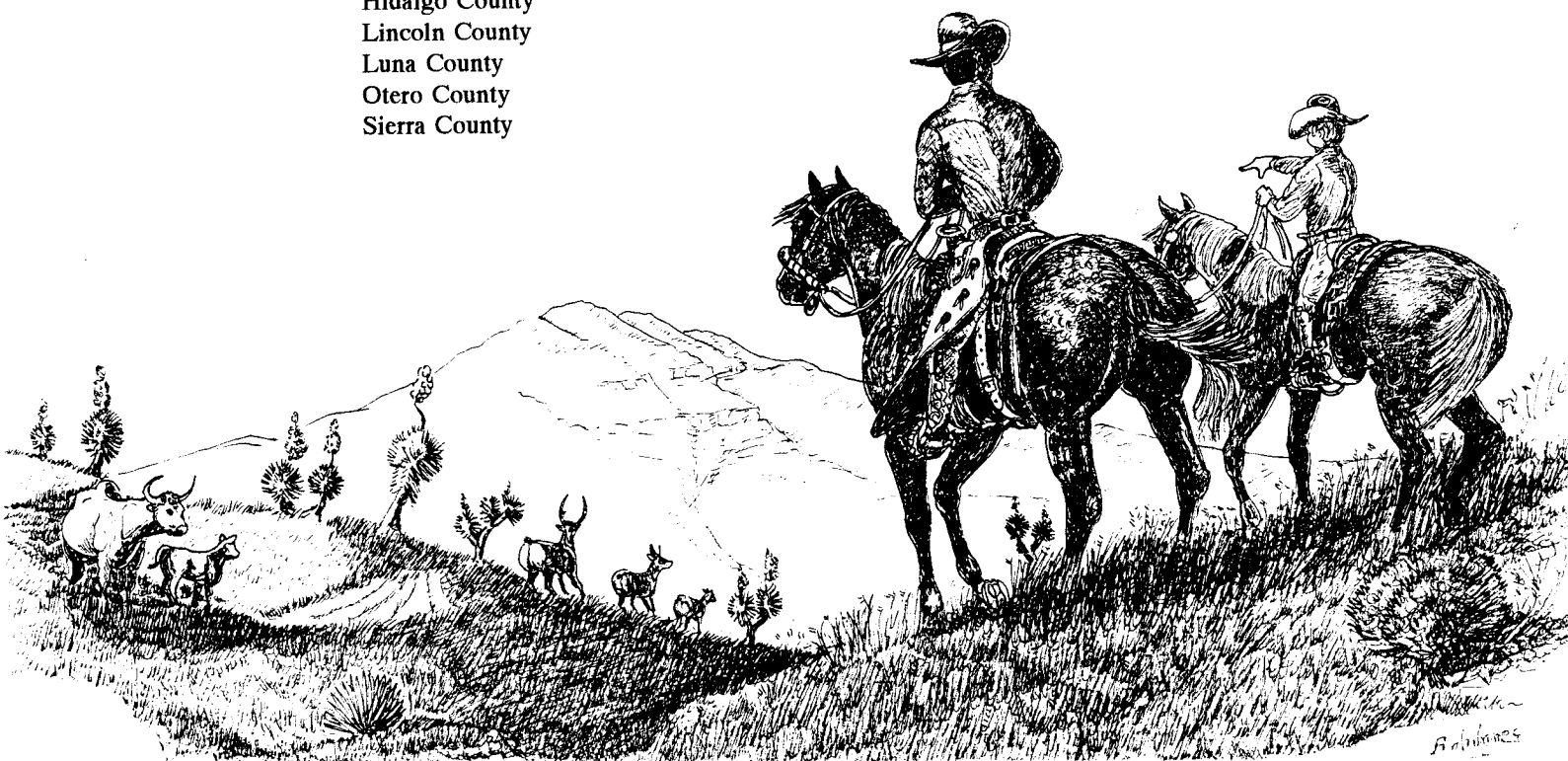


Draft Statewide Resource Management Plan Amendment/
Environmental Impact Statement

New Mexico Standards for Public
Land Health and Guidelines for
Livestock Grazing Management

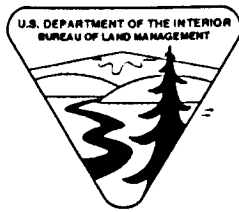
Joint Leads for project
New Mexico Bureau of Land Management
State of New Mexico

Cooperators for Project
Chaves County
Catron County
Eddy County
Grant County
Hidalgo County
Lincoln County
Luna County
Otero County
Sierra County

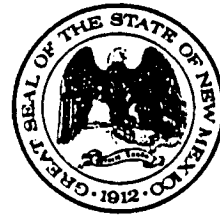


Notice

This draft document should be retained to be used in conjunction with the final document. If changes resulting from public review and comment on the draft are relatively minor, the final document will include the modifications and corrections which should be made to the draft text as a result of public review and comment, as well as a record of public comments on this draft and responses to those comments.



Bureau of Land Management
New Mexico



Office of the Lieutenant Governor
New Mexico

Dear Reader:

Enclosed for your review is the Draft Statewide Resource Management Plan Amendment/Environmental Impact Statement (EIS) for New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management. A 90-day comment period begins February 12, 1999. Written comments postmarked no later than May 17, 1999 will be accepted. Comments on the alternatives and the adequacy of the impact analysis are most useful when they address one or more of the following:

- Errors in the analysis
- New information that would have a bearing on the analysis
- Misinformation that could affect the outcome of the analysis
- Request for clarification
- A substantive new alternative whose mix of allocations differ from any of the existing alternatives

Where possible, include in your comments reference to the pages and paragraphs on which you are commenting.

Please mail comments on this draft to:

John W. (J.W.) Whitney, BLM Project Leader
Bureau of Land Management (NM-931)
P.O. Box 27115
Santa Fe, NM 87502-0115

Written comments, including names and street addresses of respondents, will be available for public review at the above address during regular business hours (8:00 a.m. to 5:00 p.m.), Monday through Friday, except holidays, and may be published as part of the proposed plan and final EIS. Individual respondents may request confidentiality. If you wish to withhold your name and street address from public review or from disclosure under the Freedom of Information Act, you must state this prominently at the beginning of your written comment. Such requests will be honored to the extent allowed by law. All submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety.

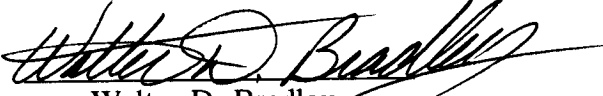
Twelve public hearings have been scheduled. All hearings will have an afternoon and an evening session. The afternoon hearing will begin at 2:00 p.m. and continue until those signed up to speak have done so by 5:00 p.m. After a break for dinner the hearing will reconvene at 7:00 p.m. for the evening hearing and run until those signed up to speak have had an opportunity to do so. Both oral and written testimony will be accepted at the hearings. A 5-minute time limit will be placed on oral comments, which should be accompanied by a written synopsis of the presentation. Written and oral comments will be equally evaluated in full and considered in the preparation of the proposed RMPA/final EIS.

Hearings are scheduled for the following locations and dates:

- March 08, 1999 - Crownpoint Institute of Technology, Crownpoint, NM
- March 09, 1999 - Civic Center located at 200 West Arrington, Farmington, NM.
- March 10, 1999 - Cuba High School, 50 County Road 13, Cuba, NM.
- March 11, 1999 - Lucero Center in the Espanola Plaza, Espanola, NM.
- March 15, 1999 - Holiday Inn at 1005 Paseo Del Pueblo Sur, Taos, NM.
- March 16, 1999 - BLM Office, 2nd Floor Conference Room, 1474 Rodeo Rd. Santa Fe, NM.
- March 17, 1999 - BLM Office, Conference Room, 1800 Marquess St. Las Cruces, NM.
- March 18, 1999 - 110 South Diamond, Deming, NM.
- March 22, 1999 - BLM Office, Conference Room, 435 Montano NE, Albuquerque, NM.
- March 23, 1999 - Otero County Courthouse, Commission Chambers, Room 253, 1000 New York Ave., Alamogordo, NM.
- March 24, 1999 - Carlsbad Public Library Annex at 101 S. Halagueno, Carlsbad, NM.
- March 25, 1999 - NM Military Institute, Toles Learning Center, Maybee Room, 101 W College, Roswell, NM.

Please retain this draft as the proposed RMPA and final EIS may be printed in abbreviated form, in which case this draft will be used as a reference document.

Thank you for participating in this planning process. Your continued involvement will allow us to effectively manage public lands and resources throughout the state.


Walter D. Bradley
Lieutenant Governor


M. J. Chávez
State Director

ABSTRACT

New Mexico Standards for Public Land Health and Guidelines for Livestock Grazing Management

Draft Statewide Resource Management Plan Amendment and Environmental Impact Statement

Draft (X)

Final ()

United States Department of the Interior, Bureau of Land Management (BLM)

1. Type of Action: Administrative (X) Legislative ()

2. Abstract: This environmental impact statement (EIS) documents the effects of adopting statewide standards for public land health and guidelines for grazing management on BLM-administered lands in New Mexico. Any standards or guidelines adopted would be incorporated into eight existing resource management plans (RMPs) covering the public lands in New Mexico. This action is proposed in accordance with revised regulations for livestock grazing on BLM-administered lands (43 CFR 4100). The proposed standards and guidelines were developed in partnership with a statewide Resource Advisory Council (RAC), and with other public input.

Four alternatives are considered in detail in this document. The first alternative (present management/no-action alternative) is the continuation of current management direction. This alternative provides a baseline for comparison with the other alternatives. The second alternative (proposed action) is to adopt the standards and guidelines developed by the RAC. This RAC alternative is also the BLM (agency) preferred alternative. The third alternative is to adopt standards and guidelines developed by the New Mexico/Arizona Coalition of Counties. The State has selected the alternative developed by the New Mexico/Arizona Coalition of Counties as their preferred alternative (see States position on page 1-5). The fourth alternative is to implement the fallback standards and guidelines defined in BLM's grazing regulations. With adoption of Alternatives 2, 3, and 4 there are changes that would be made to the existing land use plans. Any standards or guidelines adopted would incorporate changes to make the plans consistent with the guidelines adopted.

3. For further information contact:

John W. (J.W.) Whitney, BLM Project Leader
Bureau of Land Management, (NM-931)
P.O. Box 27115
Santa Fe, NM 87502-0115
(505) 438-7438

4. Comments on the draft must be postmarked no later than May 17, 1999 and must be sent to the address listed above. To be most useful, comments on the draft should be as specific as possible and address the adequacy of the analysis, the merits of the alternatives discussed, or both.

5. Date Draft Filed with EPA: February 4, 1999

6. Recommended: Linda Russell
Deputy State Director

Approved: M. Schaaf
State Director

Approved: Walter Buehler
Lt. Governor

TABLE OF CONTENTS

ACRONYMS	vii
CONVERSIONS	viii
SUMMARY	ix
CHAPTER 1 - PURPOSE AND NEED	1-1
INTRODUCTION	1-1
LOCATION AND DESCRIPTION OF THE PLANNING AREA	1-2
PLANNING AMENDMENT PROCESS	1-2
USE OF THIS DOCUMENT	1-5
ISSUES	1-5
PLANNING CRITERIA	1-5
RELATIONSHIP TO EXISTING PLANS	1-5
PREFERRED ALTERNATIVE SELECTION	1-5
CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES	2-1
INTRODUCTION	2-1
NO ACTION ALTERNATIVE (PRESENT MANAGEMENT)	2-1
RAC (PROPOSED ACTION) ALTERNATIVE	2-2
COUNTY ALTERNATIVE	2-4
FALLBACK ALTERNATIVE	2-9
ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION ...	2-13
CHAPTER 3 - AFFECTED ENVIRONMENT	3-1
INTRODUCTION	3-1
MAJOR LAND RESOURCE AREAS	3-1
36-New Mexico and Arizona Plateaus and Mesas	3-1
37-San Juan River Valley Mesas and Plateaus	3-5
39-Arizona and New Mexico Mountains	3-6
41-Southeastern Arizona Basin and Range	3-7
42-Southern Desertic Basins, Plains, and Mountains	3-8
48A-Southern Rocky Mountains	3-9
51-High Intermountain Valleys	3-9
70-Pecos-Canadian Plains and Valleys	3-10
77-Southern High Plains	3-11
VEGETATION	3-12
BLM Management and Ecological Status of the Uplands	3-12
Riparian Vegetation	3-13
SOILS	3-16
Soil Erosion	3-17
WATER	3-17
GRAZING ADMINISTRATION	3-19
Current Grazing Management	3-21
Allotment Classification	3-22
Management Issues	3-24
WILD HORSES AND BURROS	3-24

WILDLIFE	3-25
Wildlife Habitat by MLRA	3-26
Riparian Habitat Areas	3-30
Special Status Species	3-30
RECREATION	3-43
WILDERNESS	3-44
LANDS AND REALTY	3-44
Rights-of-way	3-44
Land Ownership	3-45
Exchanges and Sales	3-46
Recreation and Public Purposes Act	3-46
Public Land Withdrawals	3-46
Access	3-47
CULTURAL RESOURCES	3-47
Introduction	3-47
Overview	3-48
PALEONTOLOGY	3-48
MINERAL RESOURCES	3-49
Oil and Gas	3-49
Coal	3-49
Potash	3-50
NATIVE AMERICAN CULTURAL ISSUES	3-50
ECONOMIC CONDITIONS	3-50
HUMAN DIMENSION	3-50
Financial	3-55
Social	3-56
Cultural	3-57
CHAPTER 4 - ENVIRONMENTAL CONSEQUENCES	4-1
IMPLEMENTATION OF PUBLIC LAND STANDARDS FOR HEALTH AND GUIDELINES FOR	
LIVESTOCK GRAZING	4-1
ANALYSIS APPROACH	4-1
Economic Impact Assessment	4-1
Individual Ranch Analysis	4-2
Industry Impacts	4-2
Methodology	4-4
Human Dimension	4-6
ASSUMPTIONS FOR ANALYSIS	4-6
NO ACTION (PRESENT MANAGEMENT) ALTERNATIVE	4-9
VEGETATION	4-9
Upland Vegetation	4-9
SOILS	4-9
WATER	4-9
GRAZING ADMINISTRATION	4-9
WILD HORSES	4-10
WILDLIFE	4-11
SPECIAL STATUS SPECIES	4-15
RECREATION	4-15
WILDERNESS	4-15
CULTURAL RESOURCES	4-15
PALEONTOLOGY	4-16

REALTY/LAND USE	4-16
MINERAL RESOURCES	4-16
Saleable Minerals	4-16
Locatable Minerals	4-17
Leasable Minarals	4-17
NATIVE AMERICAN CULTURAL ISSUES	4-17
ECONOMIC CONDITIONS	4-17
HUMAN DIMENSION	4-17
 RAC ALTERNATIVE (PROPOSED ACTION)	 4-19
VEGETATION	4-19
Upland Vegetation	4-19
Riparian Vegetation	4-19
SOILS	4-19
WATER	4-19
GRAZING ADMINISTRATION	4-19
WILD HORSES	4-20
WILDLIFE	4-20
SPECIAL STATUS SPECIES	4-23
RECREATION	4-24
WILDERNESS	4-24
CULTURAL RESOURCES	4-25
PALEONTOLOGY	4-25
REALTY/LAND USE	4-25
MINERAL RESOURCES	4-25
Saleable Minerals	4-26
Locatable Minerals	4-26
Leasable Minarals	4-26
NATIVE AMERICAN CULTURAL ISSUES	4-27
ECONOMIC CONDITIONS	4-27
HUMAN DIMENSION	4-30
Finanical	4-30
Social	4-31
Cultural	4-31
 COUNTY ALTERNATIVE	 4-33
VEGETATION	4-33
Upland Vegetation	4-33
SOILS	4-33
WATER	4-33
GRAZING ADMINISTRATION	4-33
WILD HORSES	4-34
WILDLIFE	4-34
SPECIAL STATUS SPECIES	4-37
RECREATION	4-38
WILDERNESS	4-38
CULTURAL RESOURCES	4-39
PALEONTOLOGY	4-39
REALTY/LAND USE	4-39
MINERAL RESOURCES	4-40
NATIVE AMERICAN CULTURAL ISSUES	4-40
ECONOMIC CONDITIONS	4-40

HUMAN DIMENSION	4-42
Finanical	4-42
Social	4-42
Cultural	4-43
FALLBACK ALTERNATIVE	4-45
VEGETATION	4-45
Upland Vegetation	4-45
Riparian Vegetation	4-45
SOILS	4-45
WATER	4-45
GRAZING ADMINISTRATION	4-45
WILD HORSES	4-46
WILDLIFE	4-46
SPECIAL STATUS SPECIES	4-49
RECREATION	4-50
WILDERNESS	4-51
CULTURAL RESOURCES	4-51
PALEONTOLOGY	4-51
REALTY/LAND USE	4-51
MINERAL RESOURCES	4-51
NATIVE AMERICAN CULTURAL ISSUES	4-51
ECONOMIC CONDITIONS	4-51
HUMAN DIMENSION	4-53
Finanical	4-53
Social	4-54
Cultural	4-54
COMMON TO ALL ALTERNATIVES	4-55
SMALL BUSINESS REGULATORY IMPACT ANALYSIS	4-55
PRIVATE PROPERTY RIGHTS ANALYSIS	4-55
WATER RIGHTS	4-63
WATER QUALITY	4-63
STATE WILDLIFE CONSERVATION ACT	4-63
EQUITY IMPACT ANALYSIS	4-64
CIVIL RIGHTS IMPLICATIONS	4-65
ENVIRONMENTAL JUSTICE	4-65
MITIGATION MEASURES	4-65
CUMULATIVE EFFECTS	4-68
CHAPTER 5 - CONSULTATION AND COORDINATION	5-1
CONSULTATION	5-4
CONSISTENCY WITH OTHER PLANS	5-4
DISTRIBUTION OF THE DRAFT RMPA/DRAFT EIS	5-5
APPENDIX	A-1
APPENDIX A - Standards and Guidelines Regulations	A-1
APPENDIX B-1 - RMP Decisions	B-1-1
APPENDIX B-2 - Maintenance of RMP Decisions	B-2-1
APPENDIX C-1 - Letter on Section 7 Consultation to USF&WS	C-1-1
APPENDIX C-2 - Letter from USF&WS on Consultation	C-2-1
APPENDIX C-3 - Table of Federally Listed, Proposed & Candidate Species	C-3-1

APPENDIX D - Financial Threshold Analysis	D-1
APPENDIX E - Custom and Culture of Counties and Indian Tribes	E-1
COUNTIES	
Catron	E-2
Chaves	E-13
Curry	E-17
Eddy	E-18
Grant	E-21
Hidalgo	E-25
Lea	E-32
Lincoln	E-34
Luna	E-37
Otero	E-42
Rio Arriba	E-45
Santa Fe	E-49
Sierra	E-51
TRIBES	
Navajo Nation	E-59
Pueblo of Acoma	E-62
APPENDIX F - Counties Differing View of the Analysis	F-1
GLOSSARY	G-1
REFERENCES	R-1
INDEX	I-1
MAPS	
Map 1-1 New Mexico BLM Field Offices	1-3
Map 3-1 New Mexico Major Land Resource	3-4
Map 4-1 Cow/Calf Ranching Regions in New Mexico	4-7
TABLES	
Table 3-1 Acres and Percent MLRAs and BIOMES on Public Land in New Mexico	3-2
Table 3-2 Major Land Resource Areas - Land Acreage in New Mexico	3-3
Table 3-3 Standards and Guidelines - Numbers of Allotment Management Plans (AMPs) and Brush Control Projects since 1987 by MLRA	3-14
Table 3-4 Riparian Conditions by Grazing Status	3-15
Table 3-5 Existing Riparian condition for segments not meeting the standards for each alternative	3-15
Table 3-6 Number of permits and leases and AUMs by Field Office	3-22
Table 3-7 Number of Special Status Species by Habitat Type (BIOMES)	3-32
Table 3-8 RMP Biological Opinions	3-33
Table 3-9 Right-of-Way Grants Issued in 1996	3-45
Table 3-10 Land Ownership of New Mexico by County, 1994	3-51
Table 4-1a RAC Alternative Economic Impacts (Cumulative) - All Range Livestock - no ranches converting to real estate	4-29
Table 4-1b RAC Alternative Economic Impacts (Cumulative) - All Range Livestock ranches with 22 percent converting to real estate	4-29
Table 4-2a County Alternative Economic Impacts (Cumulative) - All Range Livestock - no ranches converting to real estate	4-41

Table 4-2b County Alternative Economic Impacts (Cumulative) - All Range Livestock ranches with 22 percent converting to real estate	4-41
Table 4-3a Fallback Alternative Economic Impacts (Cumulative) - All Range Livestock - No ranches converting to real estate	4-52
Table 4-3b Fallback Alternative Economic Impacts (Cumulative) - All Range Livestock ranches with 22 percent converting to real estate	4-52

FIGURES

Figure 3-1 Cattle Prices 1950-1997	3-53
Figure 3-2 Palmer Drought Severity Index (PDSI) - New Mexico	3-54
Figure 4-1 Initial Impacts and Ranch Profession	4-3
Figure 4-2 Outline of Methodology	4-5
Figure 4-3 NM Oil and Gas Sales Values and Cash Receipts for Agriculture	4-28

LIST OF ACRONYMS

ACEC	Area of Critical Environmental Concern
ACHP	Advisory Council on Historic Preservation
AHPA	Archeological and Historic Preservation Act of 1994
AIRFA	American Indian Religious Freedom Act of 1978
ALMRS	Automated Lands and Minerals Record System
AML	Appropriate Management Level
AMP	Allotment Management Plan
ARPA	Archeological Resources Protection Act of 1979
AUM	Animal Unit Month
BLM	Bureau of Land Management
BMP	Best Management Practices
°C	Degrees Celsius
C	Custodial
CDNST	Continental Divide National Scenic Trail
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CR	Conservation Recommendations
CRMP	Coordinated Resource Management Plan
DPC	Desired Plant Community
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FCSR	Farm Cost and Returns Survey
FLPMA	Federal Land Policy and Management Act
FS	Forest Service
FTE	Full Time Equivalent
GABS	Grazing Authorization and Billing System
GIS	Geographic Information System
HMA	Herd Management Area
HMAP	Herd Management Area Plan
I	Improve
IO	Input/Output Model
LGMP	Livestock Grazing Management Practice
LUP	Land Use Plan
M	Maintain
MFP	Management Framework Plan
MLRA	Major Land Resource Area
mm	Millimeters
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act of 1966
NMDFRS	New Mexico Division of Forestry and Resource Survey
NMDGF	New Mexico Department of Game and Fish
NMED	New Mexico Environment Department
NMSU	New Mexico State University
NMWQCC	New Mexico Water Quality Control Commission
NOI	Notice of Intent

NPDES	National Pollutant Discharge Elimination System
NPS	Nonpoint Source Pollution
NRCS	Natural Resource Conservation Service (formerly Soil Conservation Service)
OHV	Off Highway Vehicle
PAH	Polycyclic Aromatic Hydrocarbon
PILT	Payment-In-Lieu-of-Taxes
PMOA	Programmatic Memorandum of Agreement
PNC	Potential Natural Community
PRIA	Public Rangeland Improvement Act
RAC	Resource Advisory Council
RMP	Resource Management Plan
ROD	Record of Decision
ROW	Right-of-Way
RPM	Reasonable and Prudent Measures
R&PP	Recreation and Public Purposes
SHPO	State Historic Preservation Officer
SMA	Special Management Area
TCP	Traditional Historic Properties
T&E	Threatened and Endangered
TGA	Taylor Grazing Act
TUP	Temporary Use Permits
VOP	Value of Production
WA	Wilderness Area
WHA	Wildlife Habitat Area
WSA	Wilderness Study Area
USDI	United States Department of the Interior
USFWS	U.S. Fish and Wildlife Service

CONVERSIONS

Length

mm/25.4 = inches
cm/2.54 = inches
meters x 3.28 = feet

Area

hectares x 2.47 = acres
square kilometers x .386 = sq. miles
1 section is approximately 640 acres and/or 1 sq. mile

Temperature

degrees Celsius x 1.8 +32 = degrees Fahrenheit

S U M M A R Y

SUMMARY

This statewide resource management plan amendment statement environmental impact documents the effects of adopting standards for public land health and guidelines for livestock grazing management on Bureau of Land Management (BLM)-administered lands in New Mexico. The standards and guidelines would be incorporated into eight BLM resource management plans that cover approximately 13.5 million acres. In addition, for each alternative there are existing land use decisions that are not in conformance with the standards that would be changed to bring them into conformance.

The action is proposed in accordance with revised regulations for livestock grazing on BLM-administered lands. Standards describe conditions needed for healthy sustainable public rangelands and relate to all uses of the public lands. They provide the measure of resource quality and functioning condition upon which the public land health will be assessed. Each standard will be most effective if it can be tailored for site-specific activities that occur in different areas. However, by incorporating the standards into the existing resource management plans, all activities will be subject to the standards. In order to measure the effectiveness of each standard in specific areas, a set of measurable indicators and associated criteria were identified for each site-specific situation. These indicators and criteria were used to evaluate the standards in relation to activities that occur in different areas. The analysis identified that most activities will be minimally affected by the standards. The most affected activity will be livestock grazing.

Guidelines for livestock grazing are management tools, methods, strategies, and techniques designed to maintain or achieve standards. Guidelines for other activities are not a part of the proposal but may be developed at a later date.

Of the 2,193 grazing allotments, it is projected that between 287 to 480 allotments (a relatively small percentage) would not meet the standards, depending on the alternative. Of the allotments not meeting the standards, the majority would have to adjust the management of their livestock to some extent. The most common management adjustment would be a deferment from grazing period, or a change in season of use. In a few cases, a reduction in livestock numbers would be needed; however, large scale reductions in

numbers of livestock are not expected for any of the alternatives because adjustments have been made over time through the BLM Rangeland Monitoring Program. In the short term, some allotments would increase livestock numbers while others may be adjusted downward. Statewide, the numbers are expected to remain at approximately the past 10-year average for all alternatives. In the long term, livestock use is expected to increase as the rangelands improve in health and the forage production increases.

Four alternatives were analyzed in detail. The No-Action (Present Management) Alternative would continue land management and livestock grazing practices that BLM was using prior to the passage of the current grazing regulations approved on February 22, 1995. These practices cannot be continued under the current regulations; however, an analysis is provided to serve as a base for analysis of the other three alternatives.

The Resource Advisory Council Alternative (Proposed Action) was developed by the New Mexico Statewide Resource Advisory Council (RAC). The RAC members were from various parts of the State and represented various uses and interests in the public lands. During the development process, they received a great deal of input from the public. While the RAC Alternative blends human dimension, physical biological goals and values, it also provides a separate standard for human dimension goals and values. This alternative provides the most positive economic return to the livestock permittees for the long term.

The County Alternative is proposed by the New Mexico members of the Coalition of Arizona/New Mexico Counties. This alternative provides for a balance in each standard between the human dimension and physical and biological values and goals. The alternative focuses on insuring that historic grazing practices are maintained, and provides the most positive economic return to the livestock permittees in the short term.

The Fallback Alternative was developed as part of the current grazing regulations published in 1995. The Fallback Standards and Guidelines are now in place on an interim basis pending completion of the analysis and Record of Decision. This alternative does not include

human dimension standards. Rather, it focuses on the physical and biological goals and values and is the most environmentally proactive. As a result, the Fallback Alternative provides the least economic return to the permittees in the short term and long term.